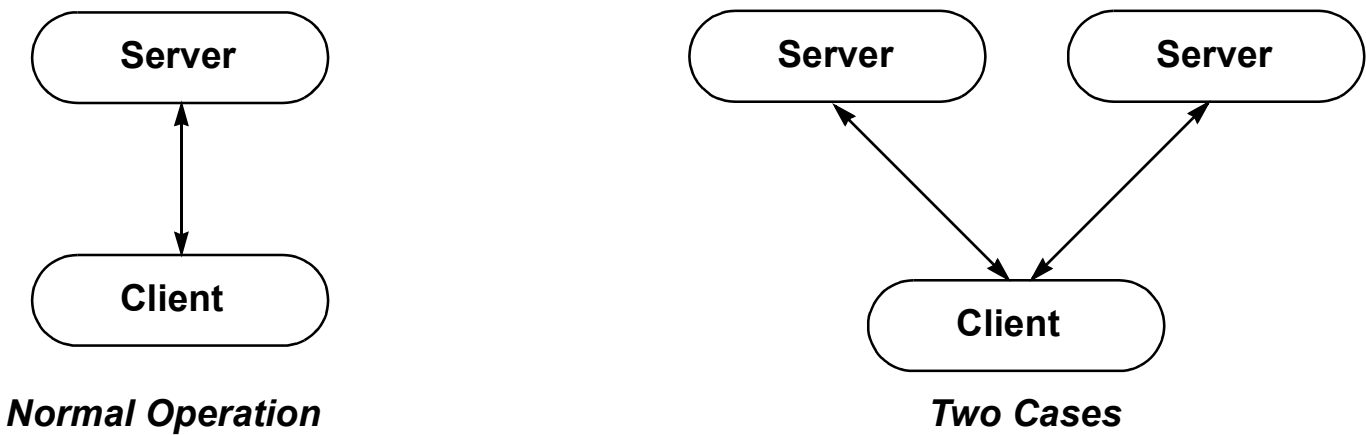


INTRODUCTION

Normal operation of EnSight involves one client process (the graphics and GUI) interfacing with one server process (data I/O and computation) to postprocess your data. You can, however, connect a single client to multiple servers at the same time. Each server maintains a unique dataset and can potentially run on different machines.



The main use of EnSight’s cases capability is to visualize multiple datasets simultaneously. Each dataset is loaded into a separate case and can be viewed in the same window or in separate viewports. You can perform before and after comparisons of the same problem or compare experimental with simulated results. The same operation (such as a clip or a particle trace) can be performed in both cases simultaneously. Created parts always belong to the same case as the parent from which the part was created. As a consequence, you cannot perform operations that combine parts (such as a merge) from multiple cases.

When EnSight reads a new case, it searches the current list of variables for matches with the variables from the new case. If it finds a match (based on an exact match of the variable name), it will not enter the new variable in the list. Rather, the matched name will be used for both. This behavior is based on the assumption that the identical variable names represent the same physical entity and should therefore be treated the same. If the new variable name does not match any existing name, the new variable is added to the list as usual.

Up to eight cases can be active at one time. To add a case to a running session, you return to the data reader. Adding a case starts a new server process and connects it to the client. You can then specify the data files and format to load into the new server. You can also replace an existing case (useful for loading a new dataset into EnSight without re-starting the client) and delete cases you no longer need.



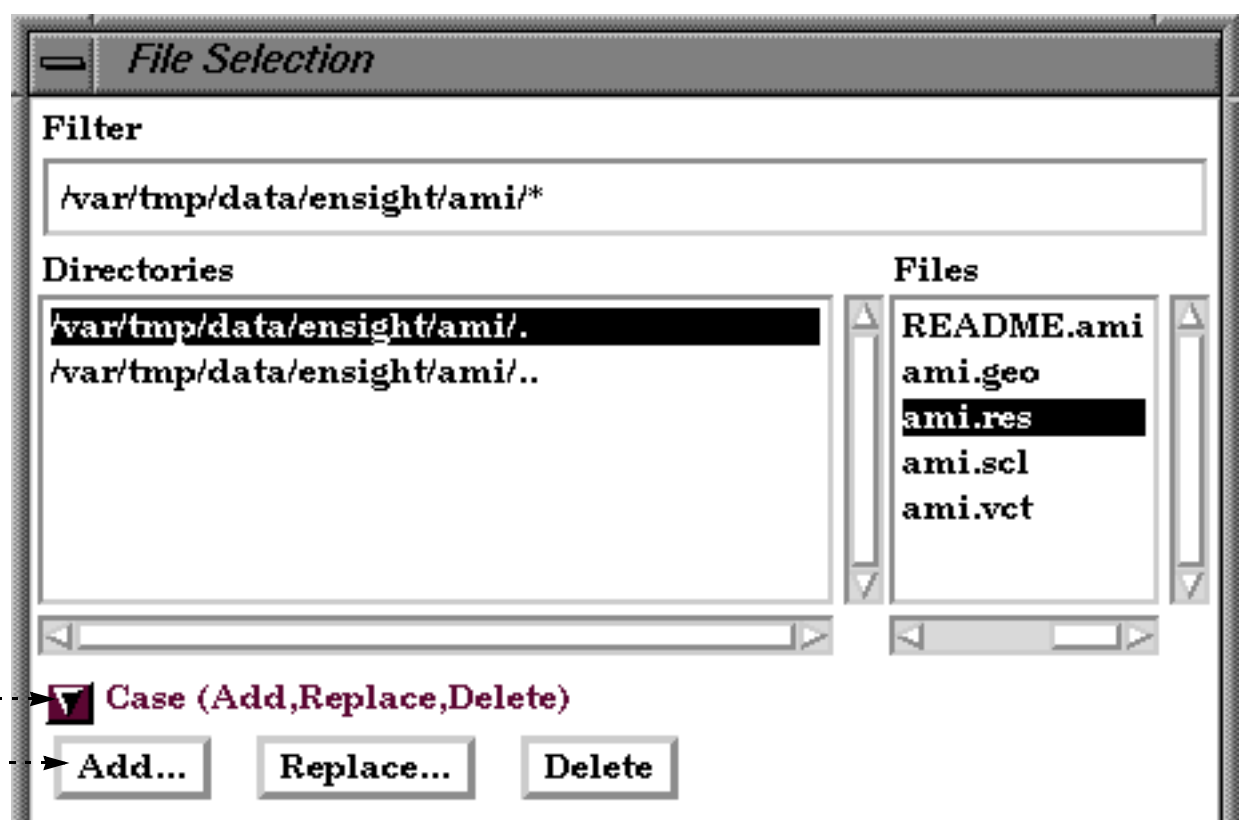
## BASIC OPERATION

Case operations are accessed through the Case menu.

### Add a Case

To add a case to a running EnSight session:

1. Select **Case > Add, Replace, Delete...** to open the data reader File Selection dialog.



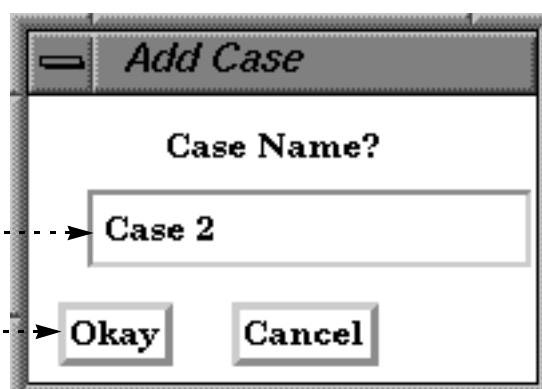
2. If the Case section is not open, click the turndown.

3. Click Add...

4. If desired, enter a name for the case (other than the default).

The name will be displayed in the Case menu so this case can be selected as the current case.

5. Click Okay.



The EnSight client will now start the connection process for the new server. If your original connection was automatic, the new server will be started automatically. If your original connection was manual, you will have to manually start another server. You can follow the progress of the connection in the Message area. See the EnSight Getting Started Manual or [How To Start and Connect Automatically](#) for more information.

## Replace a Case

You can replace an existing case. This is most useful when you wish to load a new dataset without having to stop and re-start the client. To replace a case:

1. Select the case you wish to replace in the Case menu (Case > *casename*).
2. Select Case > Add, Replace, Delete... to open the data reader File Selection dialog.
3. If the Case section is not open, click the turndown.
4. Click Replace...

You will be asked to confirm the replacement. If confirmed, the server associated with the selected case is terminated and the EnSight client will now start the connection process for the new server. If your original connection was automatic, the new server will be started automatically. If your original connection was manual, you will have to manually start another server. You can follow the progress of the connection in the Message area. See [How To Start and Connect Automatically](#) for more information.

## Delete a Case

To delete a case:

1. Select the case you wish to delete in the Case menu (Case > *casename*).
2. Select Case > Add, Replace, Delete... to open the data reader File Selection dialog.
3. If the Case section is not open, click the turndown.
4. Click Delete...

You will be asked to confirm the deletion. If confirmed, the server associated with the selected case is terminated.

## Displaying Parts by Case

By default all parts from all cases are displayed in the Main Parts list. The parts associated with a given case are shown by the “C#” code at the beginning of the part entry, where # is the number of the case. You can restrict the parts listed in the Main Parts list such that only those parts belonging to the currently selected case are shown. This is useful when you need to quickly select all the parts belonging to a case for some common operation. To do this:

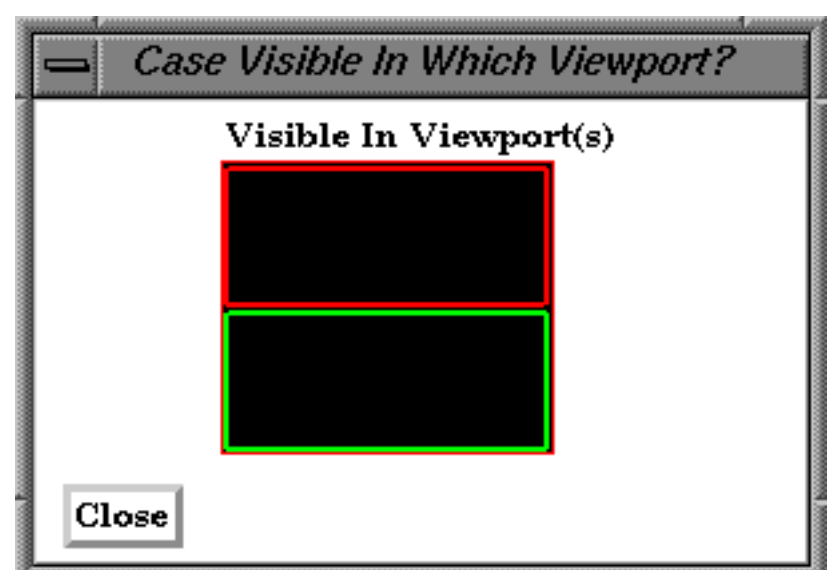
1. Select the case whose parts you wish to display in the Main Parts list in the Case menu (Case > *casename*).
2. Select Case > Restrict List Info. Per Case.

Note that the parts list in the Feature Detail Editors has also been restricted to the current case.

## Case Viewport Display

One of the chief advantages of the case feature is the ability to perform side-by-side comparisons of different datasets. The best way to do this is to display each case in a separate viewport. To do this:

1. Create as many additional viewports as you need to display your cases. See [How To Define and Change Viewports](#) for more information.
2. Select the case whose parts you wish to display only in certain viewports in the Case menu (Case > *casename*).
3. Select Case > Viewport Visibility...
4. Click in the desired viewport to enable or disable display of the selected case. Red means the selected case is not displayed in the viewport, green means that it is displayed.



## ADVANCED USAGE

EnSight's cases capability has also been used to achieve coarse-grained parallelism for very large datasets by partitioning a mesh into blocks and reading each block into a different case. Each case can run on different machines or on different CPUs of a multiprocessor host. Since the EnSight client places the geometry from the different cases in the same coordinate system, the blocks are effectively “stitched” back together for viewing. Operations such as clipping and isosurface calculation are then automatically performed in parallel. However, since there is no communication between the servers (in the current release) you cannot trace particles originating in one block and expect them to cross a block boundary into a different block.

## OTHER NOTES

When you perform an archive operation, a binary dump file is produced for *each* active server (case). The archive information file contains details about the cases and can be used to restart the EnSight client as well as all servers active when the archive was performed. See [How To Save and Restore an Archive](#) for more information.

## SEE ALSO

User Manual: [Case Menu Functions](#)